



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,418	02/13/2002	Ben Chang	3313-0479P-SP	3974

2292 7590 06/03/2004

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

PATEL, NIMESH G

ART UNIT	PAPER NUMBER
----------	--------------

2112

2

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,418

Applicant(s)

CHANG, BEN

Examiner

Nimesh G Patel

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Osakada et al.(US20010032280), hereinafter referred to as Osakada.
3. Regarding claim 1, Osakada discloses a control system for peripheral devices of a high-density server(Paragraph 9; The host in the reference corresponds to the motherboard of the applicant) utilizing a USB interface to connect a plurality of motherboards of the high-density server, a system connection back panel and a system management unit for controlling a plurality of peripheral devices, which comprises: a plurality of motherboard USB ports for connecting the plurality of motherboards(Figure 1, 103a-d); a USB interface switching module(Figure 1, 108), which is installed on the system connection back panel and connects to the plurality of motherboards through a plurality of USB connection wires, the plurality of USB connection wires connecting to a plurality of switches in the USB interface switching module and the plurality of switches connecting together to a USB output port(Figure 1, 109); a USB extension device(Figure 1, 105), which is installed on the system management unit and uses a USB connection wire to connect with the USB output port of the USB interface switching module as a USB signal output port, the USB extension device further having a plurality of USB extension ports(Figure 1, 101e-g) each of which connects to one of the plurality of peripheral

Art Unit: 2112

devices(Figure 1, 104a-c) through a USB connection wire; and a switch control unit(Figure 1, 110), which is installed on the system management unit and connects to the switching module for outputting a switching signal to the switching module to control the ON and OFF of the plurality of switches, thereby determining the connections among the plurality of motherboards and the plurality of peripheral devices(Paragraph 24).

4. Regarding claim 2, Osakada discloses a control system, wherein the plurality of switches in the USB interface switch module receive the control signals from the switch control unit, turn on one of the plurality of switches and turn off the rest switches(Paragraph 24).

5. Regarding claim 3, Osakada discloses a control system, wherein the number of signal lines conveying the switching signals of the switch control unit is determined by the number of the plurality of motherboards(It is inherent the number of switching signals is dependent on the number of motherboards since that is how many devices will be connected to the USB devices).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osakada, in view of Evans et al.('739), hereinafter referred to as Evans.

8. Regarding claim 4, Osakada does not specifically disclose a control system, wherein the number of the plurality of motherboards is 2 to the Nth power and the number of switch signal lines is N. However, Evans discloses a control system, wherein the number of the plurality of motherboards is 2 to the Nth power and the number of switch signal lines is N(Figure 2, A mux

Art Unit: 2112

is used to switch which motherboard of the 2 hosts controls the USB devices. The number of select signals is $N=1$ and 2 hosts (2 to the $N=1$ power) are used in the switching system).

Therefore it would have been obvious to include the teachings of Evans in the system of Osakada to use N select signals and 2 to the power of N signals since this would allow only one of a plurality of motherboards to control the USB devices.

9. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osakada.

10. Regarding claim 5, Osakada discloses a control system of claim 1, wherein the plurality of USB ports of the USB extension device includes keyboard USB ports, mouse USB ports, and floppy disk drive USB ports (Figure 8, 610-612).

Osakada does not specifically disclose the use of a CD-ROM USB port; However, Official Notice is being taken that CD-ROMs are commonly used in modern computing systems. Therefore it would have been obvious for USB CD-ROM ports to be included in the system of Osakada since it would allow the system perform common functions, such as reading media to install software or transfer data.

11. Regarding claim 6, Osakada discloses a control system, wherein the plurality of peripheral devices includes a keyboard, a mouse, and a floppy disk drive (Figure 8, 610-612).

Osakada does not specifically disclose the use of a CD-ROM. However, Official Notice is being taken that CD-ROMs are commonly used in modern computing systems. Therefore it would have been obvious for a CD-ROM to be included in the system of Osakada since it would allow the system perform common functions, such as reading media to install software or transfer data.

Art Unit: 2112

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references further disclose art related to switching between hosts to control devices.

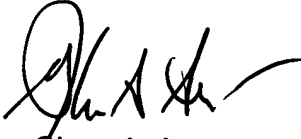
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nimesh G Patel whose telephone number is 703-305-7583. The examiner can normally be reached on M-F, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nimesh G Patel
Examiner
Art Unit 2112

NP NP
May 27, 2004


Glenn A. Auve
Primary Patent Examiner
Technology Center 2100